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# THE MINERAL INDUSTRY OF PENNSYLVANIA IN 1987

L. J. Prosser, Jr.
Robert C. Smith, II

COMMONWEALTH OF PENNSYLVANIA
Robert P. Casey, Governor
DEPARTMENT OF ENVIRONMENTAL RESOURCES
Arthur A. Davis, Secretary
OFFICE OF RESOURCES MANAGEMENT
BUREAU OF
TOPOGRAPHIC AND GEOLOGIC SURVEY
Donald M. Hoskins, State Geologist

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COVER: Face of the Eichorn quarry of Keystone Lime Company, Inc., located in southern Somerset County. Here, Keystone selectively mines the sandstone and limestone sequence for two types of aggregate and for agricultural limestone. The Burgoon Sandstone, a source of high-friction quality aggregate, forms the quarry floor. The Loyalhanna Formation, another source of quality aggregate, forms the 40-foot-thick trough-cross-stratified quartz-rich limestone directly above the quarry floor. The overlying thin, light-colored Deer Valley Limestone of the Mauch Chunk Formation is mined separately for pulverized agricultural limestone. Overburden is generally used for reclamation purposes and consists of shale and thin sandstone. The Appalachian Plateaus physiographic province is generally deficient in aggregate, and this sequence is a major source of quality aggregate.

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UNITED STATES DEPARTMENT OF THE INTERIOR • Manuel J. Lujan, Jr., Secretary

BUREAU OF MINES • T S Ary, Director

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# The Mineral Industry of Pennsylvania

**This chapter has been prepared under a Memorandum of Understanding between the Bureau of Mines, U.S. Department of the Interior, and the Pennsylvania Bureau of Topographic and Geologic Survey, Department of Environmental Resources, for collecting information on all nonfuel minerals.**

By L. J. Prosser, Jr.[1] and Robert C. Smith[2]

In 1987, the value of nonfuel mineral production in Pennsylvania surpassed $1 billion for the first time in history. The State became one of nine that reported nonfuel mineral production valued at more than $1 billion, and it accounted for nearly 4% of the U.S. total.

Pennsylvania's 21% increase in value of nonfuel mineral output over 1986 resulted primarily from unprecedented production of 97 million short tons of crushed stone. That total was the highest ever reported in the United States and ranked Pennsylvania first in output of crushed stone. The other mineral commodities produced in Pennsylvania showed little change in production levels over 1986.

**Table 1.—Nonfuel mineral production in Pennsylvania[1]**

| Mineral | 1985 | | 1986 | | 1987 | |
|---|---|---|---|---|---|---|
| | Quantity | Value (thousands) | Quantity | Value (thousands) | Quantity | Value (thousands) |
| Cement: | | | | | | |
| Masonry thousand short tons | 303 | $20,970 | 391 | $26,683 | 397 | $30,464 |
| Portland do | 5,535 | 288,036 | 6,290 | 324,187 | 6,325 | 334,709 |
| Clays[2] do | 1,142 | 5,293 | 1,234 | 5,061 | 1,206 | 4,751 |
| Gem stones | NA | e5 | NA | 5 | NA | 5 |
| Lime thousand short tons | 1,492 | 85,269 | 1,417 | 81,234 | 1,574 | 93,430 |
| Peat do | 21 | 602 | 19 | 532 | 18 | 513 |
| Sand and gravel: | | | | | | |
| Construction do | e17,000 | e74,000 | 15,373 | 68,880 | e14,800 | e72,900 |
| Industrial do | 693 | 9,846 | 688 | 10,091 | W | W |
| Stone: | | | | | | |
| Crushed do | 64,765 | 310,859 | e63,700 | e317,100 | 97,213 | 458,676 |
| Dimension do | 51 | 8,214 | e72 | e8,100 | 60 | 10,177 |
| Combined value of clays (kaolin), mica (scrap), tripoli (1986-87), and value indicated by symbol W | XX | 1,380 | XX | 1,185 | XX | 10,871 |
| Total | XX | 804,474 | XX | 843,058 | XX | 1,016,496 |

eEstimated. NA Not available. W Withheld to avoid disclosing company proprietary data, value included with "Combined value" figure. XX Not applicable.

[1]Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

[2]Excludes certain clays; kind and value included with "Combined value" data.

**Table 2.—Nonfuel minerals produced in Pennsylvania in 1986, by county[1]**

| County | Minerals produced in order of value |
|---|---|
| Adams | Lime, clays, mica (scrap). |
| Allegheny | Cement, sand and gravel, clays. |
| Armstrong | Sand and gravel, clays. |
| Beaver | Do. |
| Berks | Cement, clays. |
| Blair | Sand and gravel. |
| Bradford | Do. |
| Bucks | Sand and gravel, clays. |
| Butler | Lime, cement, sand and gravel. |
| Cambria | Sand and gravel. |
| Cameron | Do. |
| Carbon | Lime, sand and gravel. |
| Centre | Lime. |
| Chester | Clays. |
| Clearfield | Do. |
| Clinton | Do. |
| Columbia | Sand and gravel. |
| Crawford | Do. |
| Cumberland | Do. |
| Dauphin | Do. |
| Erie | Sand and gravel, peat. |
| Forest | Sand and gravel. |
| Franklin | Do. |
| Fulton | Do. |
| Huntingdon | Do. |
| Jefferson | Clays, sand and gravel. |
| Lackawanna | Peat. |
| Lancaster | Clays. |
| Lawrence | Cement, sand and gravel, clays. |
| Lebanon | Lime. |
| Lehigh | Cement. |
| Luzerne | Sand and gravel, peat. |
| Lycoming | Sand and gravel. |
| Mercer | Do. |
| Mifflin | Lime, sand and gravel. |
| Monroe | Sand and gravel, clays, peat. |
| Montgomery | Lime. |
| Northampton | Cement, sand and gravel. |
| Northumberland | Sand and gravel, clays, abrasives. |
| Pike | Sand and gravel. |
| Potter | Do. |
| Schuylkill | Do. |
| Susquehanna | Do. |
| Tioga | Do. |
| Venango | Do. |
| Warren | Do. |
| Wayne | Do. |
| Westmoreland | Do. |
| Wyoming | Do. |
| York | Cement, lime, clays. |
| Undistributed[2] | Stone (crushed), gem stones. |

[1]No production of nonfuel mineral commodities was reported for counties not listed.
[2]Data not available by county for minerals listed.

In contrast to nonfuel minerals and particularly crushed stone, Pennsylvania's coal and steel industries continued to produce at levels well below those of a decade ago. Coal production of 67 million short tons was the second lowest total in the past 25 years although Pennsylvania remained the Nation's fourth leading producer. Steel production improved slightly to about 12 million tons but was less than one-half the total produced in 1981. Pennsylvania remained the Nation's third leading producer of steel as it has since 1982.

**Trends and Developments.**—In the 1980's, Pennsylvania's mineral industry began to change from one historically dominated by coal and steel to one increasingly reliant on industrial minerals, in particular, construction aggregate. In 1987, for the first time in State history, crushed stone production surpassed that of coal. The State's construction industry beginning in 1985 became an expanding component of Pennsylvania's rebounding economy whereas the coal and steel industries continued to struggle for a share of the market because of heightened international competition.

**Legislation and Government Programs.**—The Pennsylvania General Assembly enacted a Non-Coal Surface Mining Conservation and Reclamation Act that included permitting, enforcement, and civil penalty provisions. The State Department of Environmental Resources (DER) began

developing new regulations to implement the act and was expected to promulgate the regulations in 1988. The act also established a State bonding program for surface mine operators who could not obtain bonds from normal sources such as letters of credit and collateral.

The U.S. Bureau of Mines Pittsburgh Research Center (PRC) continued research programs directed at improving health, safety, and productivity in the mining industries and conserving environmental resources. Mine-scale research was conducted under controlled conditions at facilities including the Experimental Mine, the Safety Research Coal Mine, the Mine Equipment Test Facility, the Wire Rope Laboratory, and the Lake Lynn Laboratory. Research results and plans at PRC are summarized in the publication, "Program of Research."[3]

The Pennsylvania Bureau of Topographic and Geologic Survey was the primary State agency involved in mineral resource investigations. A reconnaissance investigation of potential mica, talc, silica, and carbonate mineral fillers in the Piedmont physiographic province continued. Other economic geology studies included "Reconnaissance for Precious Metals in Southeastern Pennsylvania"; "Chromite and the Massive Chromite from the Wood's Chrome Mine, State-Line District of Pennsylvania-Maryland"; "Investigations and Analysis of High Purity Carbonate Resources in Pennyslvania"; and "Additional Occurrences of Specialty-Use Silica in Pennsylvania." A summary of these and other Survey projects was published.[4]

## REVIEW BY NONFUEL MINERAL COMMODITIES

### INDUSTRIAL MINERALS

Of the 12 nonfuel mineral commodities produced in Pennsylvania and listed in table 1, crushed stone (45%) and portland cement (33%) were the most significant in value of production. Lime and construction sand and gravel accounted for 9% and 7%, respectively, of the total value. The remainder came from output of masonry cement, common clay, kaolin, scrap mica, peat, industrial sand, dimension stone, and tripoli.

**Cement.**—The State's portland cement industry, predominantly in eastern Pennsylvania, again faced stiff competition from foreign producers. In the last 5 years, cement imports increased from 5% to about 20% of U.S. consumption. A bill to halt use of foreign cement in State-funded construction projects was introduced late in the year and was expected to be acted on in the 1988 legislative session. The measure is similar to Pennsylvania's Steel Products Procurement Act, passed in 1985 because of rising steel imports.

Nationally, about 55% of U.S. cement production capacity was foreign owned. Allentown Portland Cement Co. became the sixth cement plant in Pennsylvania to be acquired by a foreign company. Scancem Industries Inc. of Oslo, Norway, purchased the 830,000-ton-per-year-capacity plant in Evansville for $63.5 million.[5] In 1987, Pennsylvania's 13 cement plants, with about 8.2 million short tons of grinding capacity, were operated at 77% of that capacity.

**Stone.**—Stone production is surveyed by the U.S. Bureau of Mines for odd-numbered years only; this chapter contains actual data for 1985 and 1987 and estimates for 1986. Data for even-numbered years are based on annual company estimates.

Pennsylvania's stone industry produced the highest total tonnage ever reported by a State—97 million short tons. Since 1979, when the State produced nearly 72 million tons of crushed stone, output levels had been affected by changing conditions in the construction industry. From 1981 through 1983, interest rates ranged from 12% to 15%, resulting in low levels of construction activity. During that 3-year period, production of crushed stone averaged about 52 million tons annually. Also, in 1985, the State began a 12-year, $11.7 billion highway improvement and construction program, which averaged $1 billion in highway contracts awarded each year through 1987. Housing starts, another indicator of construction industry demand, increased from about 22,000 units in 1982 to about 58,000 units in 1987. In 1984, interest rates began dropping and were below 10% by 1986; crushed stone production increased, averaging 62 million tons per year from 1984 through 1986.

In 1987, 112 companies operated 208 quarries producing 97 million tons of crushed stone. The top 10 producing companies operated 57 quarries and accounted for 46% of the total output. Limestone was the dominant rock type mined; other types included granite, sandstone, and traprock.

In 1985, the U.S. Bureau of Mines began

compiling crushed stone production statistics by districts for some States. Table 4 presents end-use data for crushed stone in the four Pennsylvania districts that are depicted in figure 1. Production from district 4 in southeastern Pennsylvania accounted for about 70% of the State total. The expanding economy in this district, which includes Philadelphia and Harrisburg, created strong demand for construction aggregate. Of the 19 counties in district 4, 14 reported production in excess of 1 million tons with 6 producing more than 5 million tons.

**Table 3.—Pennsylvania: Crushed stone[1] sold or used by producers in 1987, by use**

(Thousand short tons and thousand dollars)

| Use | Quantity | Value |
|---|---|---|
| Coarse aggregate (+1-1/2 inch): | | |
| Macadam | 795 | 4,436 |
| Riprap and jetty stone | 1,760 | 8,698 |
| Filter stone | 384 | 1,962 |
| Coarse aggregate, graded: | | |
| Concrete aggregate, coarse | 6,114 | 28,976 |
| Bituminous aggregate, coarse | 5,744 | 25,620 |
| Bituminous surface-treatment aggregate | 2,051 | 10,179 |
| Railroad ballast | 903 | 4,361 |
| Fine aggregate (–3/8 inch): | | |
| Stone sand, concrete | 1,949 | 10,341 |
| Stone sand, bituminous mix and seal | 2,276 | 9,467 |
| Screening, undesignated | 1,918 | 7,593 |
| Coarse and fine aggregates: | | |
| Graded road base or subbase | 12,299 | 51,213 |
| Unpaved road surfacing | 1,220 | 5,311 |
| Terrazzo and exposed aggregate | 22 | 198 |
| Crusher run or fill or waste | 2,089 | 8,555 |
| Other construction[2] | 10,949 | 36,142 |
| Agricultural: | | |
| Agricultural limestone | 1,035 | 9,706 |
| Poultry grit and mineral food | 109 | 1,418 |
| Other agricultrual uses | (3) | (3) |
| Chemical and metallurgical: | | |
| Cement manufacture | 7,473 | 31,830 |
| Lime manufacture | 1,169 | 7,965 |
| Flux stone | 171 | 752 |
| Special: | | |
| Mine dusting and acid water treatment | 85 | 1,388 |
| Asphalt fillers or extenders | 645 | 5,035 |
| Other fillers and extenders | 663 | 9,733 |
| Other miscellaneous[4] | 1,007 | 7,685 |
| Other unspecified[5] | 33,800 | 167,118 |
| Total[6] | 97,213 | 458,676 |

[1]Includes limestone, dolomite, sandstone, traprock, granite, quartzite, and miscellaneous stone.
[2]Includes coarse aggregate (graded) and combined coarse and fine aggregates.
[3]Less than 1/2 unit.
[4]Includes dead-burned dolomite, chemical stone for alkali works, sulfur oxide removal, whiting or whiting substitute, roofing granules, glass manufacture, and waste material.
[5]Includes production reported without a breakdown by end use and estimates for nonrespondents.
[6]Data may not add to totals shown because of independent rounding.

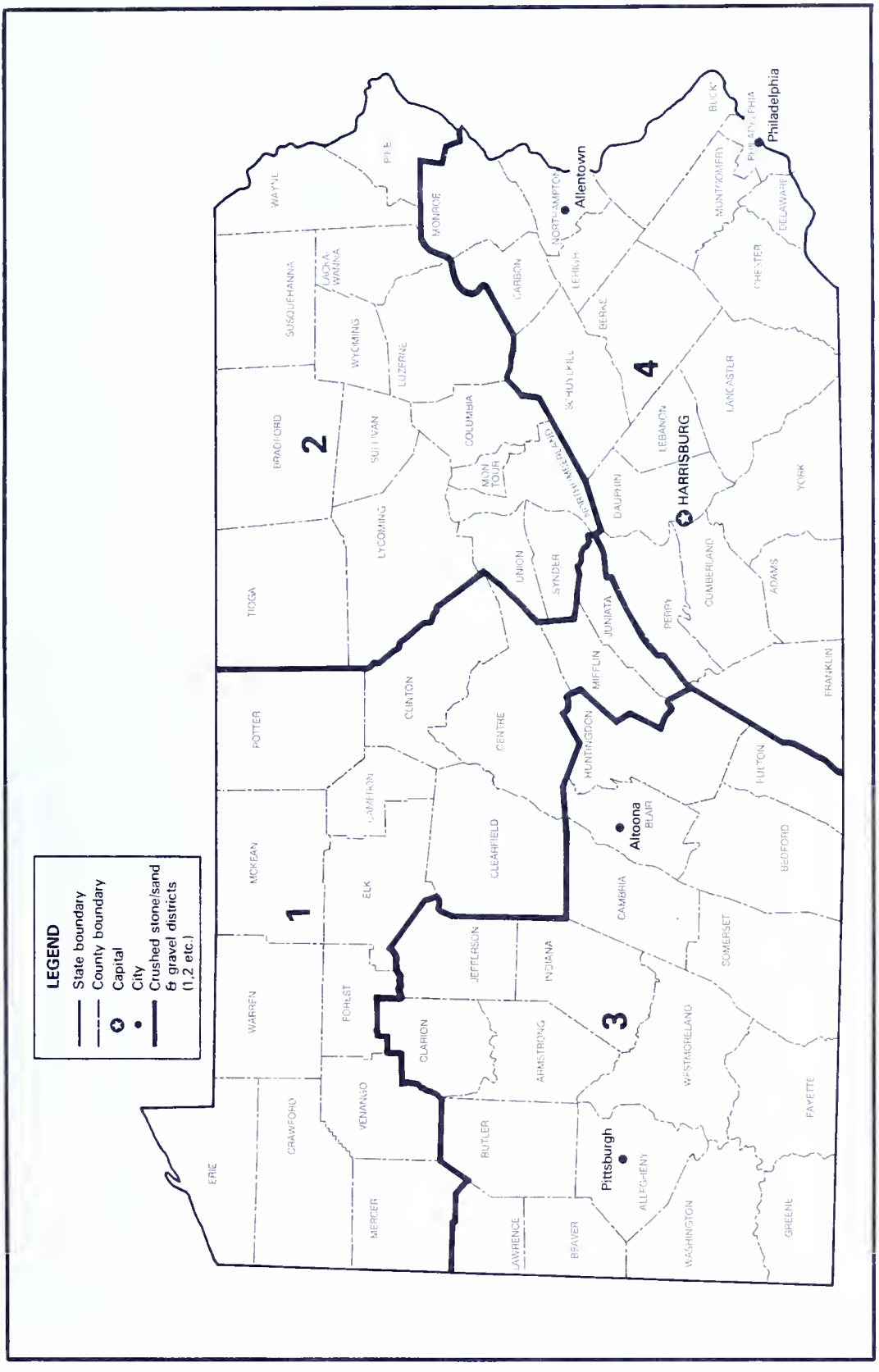


**Figure 1.—Aggregate-producing districts in Pennsylvania.**

**Table 4.—Pennsylvania: Crushed stone sold or used by producers in 1987, by use and district**

(Thousand short tons and thousand dollars)

| Use | District 1 | | District 2 | | District 3 | | District 4 | |
|---|---|---|---|---|---|---|---|---|
| | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| Coarse aggregate (+1-1/2 inch)[1] | 430 | 2,953 | 129 | 606 | 673 | 4,069 | 2,287 | 10,444 |
| Coarse aggregate, graded[2] | 908 | 3,435 | 931 | 4,079 | 2,286 | 13,107 | 14,433 | 60,184 |
| Fine aggregate (-3/8 inch)[3] | 726 | 2,397 | 525 | 2,497 | 1,199 | 6,586 | 3,693 | 15,922 |
| Coarse and fine aggregates[4] | 925 | 3,121 | 895 | 3,864 | 2,068 | 10,241 | 15,601 | 58,365 |
| Other construction | 463 | 2,311 | 357 | 1,804 | 51 | 218 | 2,474 | 9,823 |
| Agricultural[5] | 15 | 257 | 40 | 254 | 36 | 518 | 1,053 | 10,094 |
| Chemical and metallurgical[6] | 1,111 | 8,083 | 1 | 7 | 1,445 | 7,224 | 6,797 | 30,239 |
| Special[7] | W | W | 7 | 88 | W | W | 1,599 | 16,075 |
| Other miscellaneous | 41 | 432 | -- | -- | 182 | 2,093 | 32 | 168 |
| Other unspecified[8] | 233 | 1,049 | 1,929 | 9,901 | 10,562 | 53,503 | 21,076 | 102,665 |
| Total[9] | 4,851 | 24,037 | 4,814 | 23,099 | 18,503 | 97,560 | 69,046 | 313,979 |

W Withheld to avoid disclosing company proprietary data; included with "Other unspecified."

[1]Includes macadam, riprap and jetty stone, and filter stone.

[2]Includes concrete aggregate (coarse), bituminous aggregate (coarse), bituminous surface-treatment aggregate, railroad ballast, and coarse aggregate (graded).

[3]Includes stone sand (concrete and bituminous mix or seal), and fine aggregate (screen).

[4]Includes graded road base or subbase, unpaved road surfacing, terrazzo and exposed aggregate, crusher run or fill or waste, and combined coarse and fine aggregates.

[5]Includes agricultural limestone, poultry grit and mineral food, and other agricultural uses.

[6]Includes cement manufacture, lime manufacture, dead-burned dolomite, flux stone, chemical stone for alkali works, glass manufacture, and sulfur oxide removal.

[7]Includes mine dusting, asphalt filler, whiting or whiting substitute, other fillers or extenders, roofing granules, and waste material.

[8]Includes production reported without a breakdown by end use, estimates for nonrespondents, and data indicated by symbol W.

[9]Data may not add to totals shown because of independent rounding.

**Other Industrial Minerals.**—Masonry cement was produced at 10 plants in Pennsylvania in 1987. Output of nearly 400,000 short tons ranked the State second nationally and accounted for about 11% of the U.S. total. Common clay was produced at 26 mines and pits; fire clay at 2 and kaolin at 1. Output of common clay and kaolin remained about the same as in 1986; fire clay production dropped by about 48% as demand from the steel industry continued to decline. Lime production increased by about 11% and the State ranked third nationally in output. Bethlehem Steel Corp. sold its lime plants and limestone quarries in Hanover and Millard to Broyhill & Associates Inc. Mica (scrap) was mined from an open pit near Fairfield, Adams County, by one producer. Peat was produced by eight companies with bogs in Erie, Lackawanna, Luzerne, and Monroe Counties. Industrial sand was produced by two companies; one in Allegheny County, the other in Huntingdon County. Dimension stone was produced at 17 quarries by 12 companies. Tripoli was produced by one company in Northumberland County.

**Table 5.—Pennsylvania: Lime sold and used by producers, by use**

| Use | 1986 | | 1987 | |
|---|---|---|---|---|
| | Quantity (short tons) | Value (thousands) | Quantity (short tons) | Value (thousands) |
| Agriculture | 57,691 | $3,135 | 35,541 | $1,811 |
| Acid water neutralization | 11,639 | 762 | 15,914 | 1,022 |
| Paper and pulp | 25,779 | 1,265 | W | W |
| Steel, basic oxygen furnace | 569,221 | 28,847 | W | W |
| Steel, electric | 146,770 | 7,007 | 132,503 | 6,057 |
| Sewage treatment | 107,790 | 6,131 | 90,211 | 5,062 |
| Water purification | 64,514 | 3,720 | 45,830 | 2,624 |
| Other[1] | 433,897 | 30,367 | 1,254,015 | 76,854 |
| Total | 1,417,301 | 81,234 | 1,574,014 | 93,430 |

W Withheld to avoid disclosing company proprietary data; included with "Other."

[1]Includes alkalies, briquetting explosives, glass (1986), industrial soil waste, ladle desulfurization, open-hearth steel, ore concentration, other chemical and industrial, other metallurgy, other stabilization, paint, petroleum refining, road stabilization, refractory shapes, sand-lime brick, silica brick, soil stabilization, sugar refining, sulfur removal, tanning, wire drawing; and data indicated by symbol W.

## METALS

Metals discussed in this section were processed from materials received from both foreign and domestic sources. Production and value data for these commodities, which are not included in table 1, are given, if available. No metals were mined in Pennsylvania.

**Iron and Steel.**—Pennsylvania ranked third among 10 States producing pig iron; shipments in 1987 totaled about 5.1 million short tons valued at $1.1 billion. Steel production was about 11.7 million tons and the State also ranked third nationally in output of that commodity. Production of pig iron and steel in 1986 was 4.5 million tons and 9.5 million tons, respectively.

A labor strike at USX Corp. halted production from August 1986 until February 1987. The contract settling the 6-month strike at USX reduced labor cost by about $2.00 per hour. The union received a profit-sharing plan and a company commitment to modernize some plants.

Installation of a continuous caster at the Edgar Thomson plant near Braddock was part of the agreement. The caster would be the first installed by USX in Pennsylvania; nationwide, the firm continuously cast about 60% to 65% of its steel, about the same proportion as the domestic steel industry as a whole. In contrast, about 97% of Japan's steel was continuously cast. USX also agreed not to close the open-hearth furnaces at its Fairless, PA, plant for the length of the contract, which would expire in February 1991.

By the fourth quarter, steel producers in Pennsylvania and throughout the United States were beginning to benefit from the dollar's lower foreign-exchange rate. This brought the price of some domestic steel in line with prices in the international market. USX reactivated its export unit in Pittsburgh to expand opportunities to compete with foreign steelmakers. The unit had been disbanded in 1984.

Bethlehem Steel Corp. operated three of its five raw-steel-producing facilities in Pennsylvania at Bethlehem, Johnstown, and Steelton. In 1987, Bethlehem utilized 72% of 16 million tons of steelmaking capability; about one-third of the firm's steelmaking capability was at its three Pennsylvania plants.

**Zinc.**—Although zinc is no longer mined in Pennsylvania, smelting operations continued at Monaca and Palmerton. In September, Horsehead Industries Inc. (HII) became the Nation's largest zinc producer with the purchase of St. Joe Resources Co., a transaction that included St. Joe's Monaca smelter. HII, the parent of New Jersey Zinc Co. Inc., which operates the Palmerton smelter, combined that operation with those previously owned by St. Joe to form a new company called Zinc Corp. of America. The move was expected to increase the efficiency of the smelters in Pennsylvania.

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[1]State Mineral Officer, Bureau of Mines, Pittsburgh, PA.

[2]Economic geologist, Pennsylvania Bureau of Topographic and Geologic Survey, Department of Environmental Resources, Harrisburg, PA.

[3]U.S. Bureau of Mines. Program of Research. Pittsburgh Research Center, Cochrans Mill Rd., Box 18070, Pittsburgh, PA 15236.

[4]Pennsylvania Geology. Bureau of Topographic and Geologic Survey. V. 19, No. 4, Aug. 1988, 32 pp.

[5]The Morning Call (Allentown, PA). Allentown Cement Plant To Get Foreign Owner. Dec. 10, 1987, p. 4.

**Table 6.—Principal producers**

| Commodity and company | Address | Type of activity | County |
|---|---|---|---|
| Cement: | | | |
| Coplay Cement Co | Drawer 32<br>Nazareth, PA 18064 | Plant and quarries. | Lehigh and Northampton. |
| General Portland Inc | 5160 Main St.<br>Whitehall, PA 18052 | Plant | Lehigh. |
| Hercules Cement Co | Center St.<br>Stockertown, PA 18083 | Plant and quarry. | Northampton. |
| Lone Star Industries Inc | Wood & Prospect St.<br>Box 270<br>Nazareth, PA 18064 | Plant | Do. |
| Clays: | | | |
| L. D. Baumgardner Coal Co. Inc | Box 127<br>Lanse, PA 16849 | Pit | Clearfield. |
| Glen-Gery Corp | Box 1542<br>Reading, PA 19603 | Pits and plant | Adams, Berks, York. |
| Medusa Corp | Box 5668<br>Cleveland, OH 44101 | Pit | Lawrence. |
| Lime: | | | |
| Bethlehem Steel Corp.[1] | Martin Tower<br>Bethlehem, PA 18016 | Plants and quarries. | Adams and Lebanon. |
| Mercer Lime & Stone Co | 525 William Penn Pl.<br>Pittsburgh, PA 15219 | Plant | Butler. |
| Warner Co | Yellow Springs Rd.<br>Devault, PA 19432 | Plant, mine, quarries. | Centre and Chester. |

See footnote at end of table.

**Table 6.—Principal producers —Continued**

| Commodity and company | Address | Type of activity | County |
|---|---|---|---|
| Peat: | | | |
| Gouldsboro Wayne Peat Co | Box 68<br>Gouldsboro, PA 18424 | Bog | Lackawanna. |
| Lake Benton Peat Moss | 622 South Blakely St.<br>Dunmore, PA 18512 | Bog | Do. |
| Sand and gravel: | | | |
| Construction: | | | |
| Davison Sand & Gravel Co | Third Ave. and Fourth St.<br>New Kensington, PA 15068 | Dredge and pits. | Armstrong and Westmoreland. |
| Dravo Corp | 4800 Grand Ave.<br>Pittsburgh, PA 15222 | Dredge, pit, plant. | Allegheny and Beaver. |
| Glacial Sand & Gravel Co | Box 1022<br>Kittanning, PA 16201 | do | Armstrong. |
| Stabler Co. Inc.[1] | Box 3188<br>Wescoville, PA 18106 | Pits and plants. | Bradford and Northampton. |
| Warner Co | 699 Bristol Pike<br>Morrisville, PA 19067 | Pit and plant | Bucks. |
| Wyoming Sand & Stone Co | R.D. 1<br>Falls, PA 18615 | do | Wyoming. |
| Industrial: | | | |
| McCrady Inc | Box 11566<br>Pittsburgh, PA 15238 | Quarries and plant. | Allegheny. |
| U.S. Silica Co | Box 187<br>Berkeley Springs, WV 25411 | do | Huntingdon. |
| Stone: | | | |
| Crushed: | | | |
| The General Crushed Stone Co., a subsidiary of Koppers Co. Inc. | Box 231<br>Easton, PA 18042 | do | Berks, Bucks, Chester, Clinton, Columbia, Dauphin, Delaware, Lancaster, Montour, Tioga, York. |
| New Enterprise Stone & Lime Co. Inc. | R.D. 3<br>New Enterprise, PA 16664 | do | Adams, Bedford, Blair, Cumberland, Franklin, Huntingdon, Lancaster, Somerset. |
| Dimension: | | | |
| A. Dally & Sons Inc | Railroad Ave., Box 27<br>Pen Argyl, PA 18072 | Quarries and mills. | Northampton. |
| Delaware Quarries | Route 32<br>Lumberville, PA 18933 | Quarry | Bucks. |
| Pennsylvania Granite Corp | Box 510<br>St. Peters, PA 19470 | do | Chester. |

[1]Also stone.

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